

### Remarks

A restriction requirement under 35 U.S.C. §§121 and 372 was set forth in the Official Action dated November 30, 2007, in the above-identified patent application.

At the outset, it is noted that a shortened statutory response period of one (1) month was set forth in the November 30, 2007, Official Action. Therefore, the initial due date for response was December 30, 2007. A petition for a one (1) month extension of time is presented with this response, which is being filed within the one month extension period.

It is the Examiner's position that claims 1-13 and 15-40 in the present application are drawn to nine (9) patentably distinct inventions which are as follows:

- Group I:            Claims 1-5 and 7, drawn to a method for tolerizing a population of cells comprising contacting a population of cells with a toleragenic peptide in vitro.
- Group II:           Claims 1-5 and 7, drawn to a method for tolerizing a population of cells comprising contacting a population of cells with a nucleic acid encoding a toleragenic peptide in vitro.
- Group III:          Claims 1, 2, and 6-7, drawn to a method for tolerizing a population of cells comprising administering a toleragenic peptide to a subject.
- Group IV:           Claims 1, 2, and 6-7, drawn to a method for tolerizing a population of cells comprising administering a nucleic acid encoding a toleragenic peptide.
- Group V:            Claims 8-13 and 40, drawn to a composition comprising EBV LMP1 or LMP2, or a toleragenic peptide thereof.
- Group VI:           Claims 8-13, drawn to a composition comprising a nucleic acid encoding EBV LMP1 or LMP2, or a toleragenic peptide thereof.
- Group VII:          Claims 15-25, drawn to a method for assessing the tolerogenicity of a test peptide comprising contacting a cell population with a test peptide and determining IL-10 expression.

- Group VIII: Claims 26-33, drawn to a method for assessing the tolerogenicity of a test peptide comprising contacting a cell population with a test peptide and a target antigen, and assessing cell proliferation or expression of IL-4, IL-2, IL-12 or IFN-gamma.
- Group IX: Claims 34-39, drawn to a method for assessing the tolerogenicity of a test peptide comprising contacting a first cell population with a test peptide and second cell population with a control peptide.

The Examiner has also required the election of a single species of peptide or nucleic acid molecule, such as those listed in claims 1, 13, and 40.

It is the Examiner's position that the inventions listed as Groups I - IX do not relate to a single general inventive concept under PCT Rule 13.1, because, under PCT Rule 13.2, they lack the same or corresponding special technical feature because the composition of Group V comprises LMP1 which is allegedly taught by Izumi et al. (1997). Consequently, the Examiner asserts the instant application has no special technical feature that defines the contribution over the prior art.

While not agreeing with the Examiner that Izumi et al. disclose a composition or methods as instantly claimed, Applicants respectfully traverse the restriction between the Group I through Group IX inventions. A withdrawal of the restriction requirement is clearly in order for the reasons set forth below.

First, Applicants respectfully submit that during the international stage of this application the PCT Examiner did not make a lack of unity finding and considered all of the claims to be directed to a single invention. The instant restriction requirement fails to comply with the established United States Patent and Trademark Office practice of following the international rules regarding unity of invention in the prosecution of applications filed under §371. While the Examiner purports to employ the general inventive concept

practice under PCT Rule 13.1, it is wholly unclear how the Examiner could conclude that the instant application has nine (9) Groups of inventions, when the PCT Examiner, employing the same rules, determined that identical claims in the international application have complete unity of invention. Accordingly, Applicants respectfully request the instant restriction requirement be withdrawn and all of the claims be examined on their merits.

Second, Applicants respectfully submit that the restriction requirement set forth above is improper for failure to comply with the relevant provisions of the Manual of Patent Examining Procedure (M.P.E.P.) pertaining to unity of invention determinations. As stated in §1893.03(d) of the M.P.E.P.:

Examiners are reminded that unity of invention (not restriction) practice is applicable in international applications (both Chapter I and II) and in national stage applications submitted under 35 U.S.C. 371.

The principles of unity of invention are used to determine the types of claimed subject matter and the combinations of claims to different categories of invention that are permitted to be included in a single international or national stage patent application.

The basic principle is that an application should relate to only one invention or, if there is more than one invention, that applicant would have a right to include in a single application only those inventions which are so linked as to form a single general inventive concept.

A group of inventions is considered linked to form a single general inventive concept where there is a technical relationship among the inventions that involves at least one common or corresponding special technical feature. The expression special technical features refers to those technical features that define the contribution which each claimed invention, considered as a whole, makes over the prior art.

In fact, the only requirement for unity of invention is whether there is a single general inventive concept to the

claims. A single general inventive concept will exist where there is the same or corresponding special technical feature. This is apparent from the fact that the only requirement set out in the Rules of the PCT governing how unity is assessed is Rule 13 PCT. Rule 13 PCT states that:

13.1 Requirement:

The international application shall relate to one invention only or to a group of inventions so linked as to form a single general inventive concept ("requirement of unity of invention").

13.2 Circumstances in Which the Requirement of Unity of Invention Is to Be Considered Fulfilled:

Where a group of inventions is claimed in one and the same international application, the requirement of unity of invention referred to in Rule 13.1 shall be fulfilled only when there is a technical relationship among those inventions involving one or more of the same or corresponding special technical features. The expression "special technical features" shall mean those technical features that define a contribution which each of the claimed inventions, considered as a whole, makes over the prior art.

The Examiner contends that the invention of Group V (i.e., a *pharmaceutical composition comprising LMP1, further comprising a target antigen in a pharmaceutically acceptable carrier*) lacks a corresponding technical feature and is disclosed by Izumi et al. Applicants respectfully disagree. Izumi et al. teach LMP1 linked to the FLAG peptide, which the Examiner believes is LMP1 linked to a target antigen. Assuming, *arguendo*, this is correct, Izumi et al. does not disclose a pharmaceutical composition comprising such a molecule, and the

reference makes absolutely no disclosure about administering such a composition to a subject previously infected with EBV to tolerize the subject against the target antigen. Accordingly, Izumi et al. does not disclose all the elements of claim 8, let alone other claims in the application. Furthermore, the MPEP section 1893.39(d) states that: "When making a lack of unity of invention requirement, the examiner must (1) list the different groups of claims and (2) explain why each group lacks unity with each other group (i.e., why there is no single general inventive concept) specifically describing the unique special technical feature in each group." Thus, the MPEP specifically requires the Examiner to explain why there is no single general inventive concept, but in the present case, the Examiner provides no reasoning as to how the Izumi et al. reference provides justification for dividing the remainder of the claims up into 8 different groups.

On the other hand, the present inventors have discovered that tolerogenic peptides derived from LMP1 and LMP2 can be used to induce tolerance to a target antigen in an individual sero-positive for EBV. The entire claim set reflects this finding, which constitutes the common special technical feature under PCT Rule 13.2, and distinguishes the present invention over the prior art. In light of the foregoing, the Examiner's assertion that the instant invention does not define a contribution over the prior art and therefore does not constitute a special technical feature is erroneous on its face.

Applicants respectfully submit that if all of the claims share a special corresponding technical feature then they must be considered to have unity of invention. As the present invention is not anticipated or even suggested by the disclosure of Izumi et al., the restriction of the claims is improper and should be retracted.

Additionally, Applicants respectfully request that, should the restriction requirement not be withdrawn in full,

the Examiner consider modifying the lack of unity raised between Groups I-IV and examine these groups together. The inventive concept of these groups (i.e., methods for inducing tolerance to a tolerogenic molecule in EBV subjects) was not recognized anywhere in the art and constitutes a significant contribution to the field. The claims of Groups I - IV all relate to methods of tolerizing cells to a target antigen, and Applicants submit that under a proper consideration of unity of invention (as opposed to restriction practice), there is no rationale for separating out claims to a polypeptide and a nucleic acid encoding it. The novel and inventive method of tolerization itself represents a link between these various groups. Thus, at least the claims of Groups I - IV clearly relate to the same inventive concept. Accordingly, Applicants respectfully request withdrawal of the restriction requirement between these groups.

Lastly, the Examiner has also identified claim 1 as a linking claim. In accordance with §809 of the M.P.E.P., "[t]he linking claims must be examined with, and thus are considered part of, the invention elected. When all claims directed to the elected invention are allowable, should any linking claim be allowable, the restriction requirement between the linked inventions must be withdrawn. Any claim(s) directed to the nonelected invention(s), previously withdrawn from consideration, which depends from or requires all the limitations of the allowable linking claim must be rejoined and will be fully examined for patentability."

For all of the foregoing reasons, Applicants respectfully request withdrawal of the present restriction requirement.

In order to be fully responsive to the instant restriction requirement, Applicants hereby elect, with traverse, Group III, namely claims 1, 2, 6, and 7, drawn to methods for tolerizing a population of cells comprising administering a tolerogenic peptide to a subject. Applicants further elect the species of peptide P4 (SEQ ID NO: 4), and it is submitted that this species of peptide reads on claims, 1,


2, 6, and 7.

Applicants' election in response to the present restriction requirement is without prejudice to their right to file one or more continuing applications, as provided in 35 U.S.C. §120, on the subject matter of any claims finally held withdrawn from consideration in this application.

In accordance with the instant amendment, Applicants have also added new claims 41-46. Support for these new claims can be found throughout the specification including, for example, at page 17, lines 22-29, page 21, lines 1-5, and the original claims. It is respectfully submitted that no new matter has been introduced into this application by reason of the amendments presented herewith. New claims 41-43 depend from linking claim 1 and should be included in Groups I-IV, including elected Group III. Claims 41-43 read on the elected species. New claims 44-46 depend from claim 8 and should be included with Group V.

Early and favorable action on the merits of this application is respectfully solicited.

Respectfully submitted,  
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